

TABLE 32-2

Involuntarily out-of-field rate among U.S. residing doctoral scientists and engineers, by occupation: 2023

(Percent and SE)

Occupation	Involuntarily out-of-field rate	
	Percent	SE
All occupations	2.7	0.10
Science occupations	2.1	0.15
Biological, agricultural, and other life scientists	1.1	0.15
Agricultural, food scientists	1.1	0.50
Biochemists, biophysicists	1.3	0.50
Biological scientists	1.4	0.35
Forestry, conservation scientists	D	D
Medical scientists	1.2	0.25
Postsecondary teachers, agricultural, other natural sciences	D	D
Postsecondary teachers, biological sciences	0.2	0.10
Other biological, agricultural, life scientists	1.7	0.55
Computer and information scientists	7.1	0.55
Computer and information scientists	8.2	0.65
Postsecondary teachers, computer science	D	D
Mathematical scientists	3.6	0.50
Mathematical scientists	5.5	0.80
Postsecondary teachers, mathematics, statistics	D	D
Physical scientists	0.9	0.20
Chemists, except biochemists	1.3	0.45
Earth, atmospheric, ocean scientists	0.9	0.35
Physicists, astronomers	S	S
Postsecondary teachers, chemistry	D	D
Postsecondary teachers, physics	D	D
Postsecondary teachers, other physical science	D	D
Other physical scientists	4.8	2.10
Psychologists	S	S
Psychologists	S	S
Postsecondary teachers, psychology	D	D
Social scientists	0.7	0.20
Economists	D	D
Political scientists	D	D
Postsecondary teachers, economics	D	D
Postsecondary teachers, political science	D	D
Postsecondary teachers, sociology	D	D
Postsecondary teachers, other social sciences	D	D
Sociologists, anthropologists	D	D
Other social scientists	2.9	0.75
Engineering occupations	1.7	0.20
Aerospace, aeronautical, astronautical engineers	2.0	0.60
Chemical engineers	1.7	0.80
Civil, architectural, sanitary engineers	S	S
Electrical engineers	1.1	0.30
Industrial engineers	5.7	2.80
Mechanical engineers	3.2	1.20
Postsecondary teachers, engineering	D	D
Other engineers	2.6	0.50
S&E-related occupations	2.3	0.25
Health occupations, except postsecondary teachers and managers	2.2	0.30
Postsecondary teachers, health and related science	0.9	0.40
S&E managers, including health	1.8	0.40

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(Percent and SE)

Occupation	Involuntarily out-of-field rate	
	Percent	SE
S&E precollege teachers	5.6	1.35
S&E technicians and technologists	7.0	1.55
Other S&E-related occupations	S	S
Non-S&E occupations	5.7	0.30
Arts, humanities-related occupations	6.3	1.10
Management-related occupations	8.4	0.75
Non-S&E managers	2.4	0.40
Non-S&E postsecondary teachers	1.0	0.40
Non-S&E precollege and other teachers	9.5	1.65
Sales, marketing occupations	15.2	2.55
Social service-related occupations	3.8	1.10
Other non-S&E occupations	11.8	1.15

D = suppressed to avoid disclosure of confidential information. S = suppressed for reliability; coefficient of variation exceeds publication standards.

S&E = science and engineering; SE = standard error.

Note(s):

Percentages are rounded to the nearest 0.1%. Standard errors of unrounded percentages (based on unrounded counts) are rounded up to the nearest multiple of 0.05%. Involuntarily out-of-field rate is the percentage of employed individuals who reported, for their principal job, working in an area not related to their first doctoral degree at least partially because a job in their doctoral degree field was not available. Residence location is based on reported living location on 1 February 2023.

Source(s):

National Center for Science and Engineering Statistics, Survey of Doctorate Recipients, 2023.